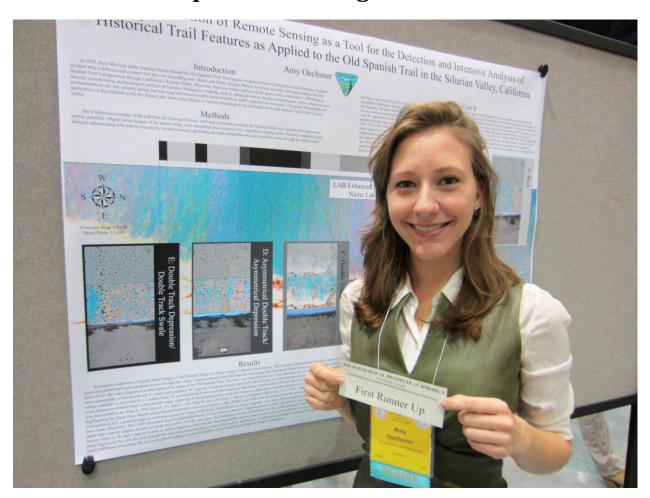
Old Spanish Trail Segment 'Found'



The 19th Century overland route to Southern California had disappeared. Maps and historical accounts showed a 50-mile segment of the Old Spanish Trail entering California south of Death Valley and running through the Silurian Valley to present-day Baker, Calif. However, by the end of the 20th Century, no one could find this segment of the Southwest's most important 19th Century trail. Its "scent" had gone cold.

The Silurian Valley segment was but a portion of the 1,000-mile historic trade route from northern New Mexico to Southern California established in 1829. The Old Spanish Trail had made it possible for traders to transport Native American-made blankets from Santa Fe for horses and mules from Los Angeles. Until the railroads reached Southern California in the 1870s, the trail was the route of choice for miners, Mormons, and other emigrants seeking life in the Golden State.

Finding archaeological evidence of the exact location of the trail as it traversed the Silurian Valley became the focus of extensive field surveys conducted in 1998. They failed, however, to identify corroborating archaeological artifacts or features. In fact, creosote shrubs have reclaimed so much of the trail that its exact location is easily overlooked. And a common trait of creosote is its uncanny ability to create false visual alignments in desert landscapes that give the illusion of a trail when none is there.

BLM Barstow archaeologist technician Amy Oechsner had an idea, though. "At the start of my internship," said Oechsner, "I worked with BLM Archaeologist Jim Shearer who was using aerial imagery to identify a possible prehistoric lizard intaglio. Seeing the imagery used to identify the intaglio inspired me to try it on the trail." She surmised that by using a combination of digital aerial images, Geographic Information System (GIS), and image enhancing software she could map the trail using visual imagery and then confirm its location in the field with surface impaction and archaeological evidence.

"These aerial images when digitized," said Oechsner, "revealed a single weathered-linear feature that provided the most straightforward and expedient course through the valley. And importantly, the feature connected the Old Spanish Trail camps Salt Spring and Bitter Spring. Without those springs as a source for water, travelers would not have been able to traverse the desert."

In her research, Oechsner categorized linear traces (lines of vegetation through the desert that appeared to adjoin the remains of a trail) from least perceptible or poorly preserved to the most perceptible or well preserved. Using enhancement software, she was then able to rule out most of the linear features until only the trace of the probable Old Spanish Trail remained.

Out in the field, Oechsner followed the trace and in fact found archaeological artifacts confirming it was indeed the long lost trail. She found fragments of the popular Zachary Taylor President Pipe, ceramics from the era, and hand-forged horse and mule shoes. Recently she presented her Silurian Valley research at the Archaeological Institute of America's annual meeting in Seattle, where she was awarded First Runner Up for her work. Oechsner loves her work in archaeology, she says, because "the more effectively we document history's physical record to define our human experience, the better we will know ourselves as individuals and as a species."

Zachary Taylor U.S. President stummelpfeifen (President Pipe) fragment



Pipe fragment (right) and whole president pipe (left). Pipe stems face viewer.



President Pipe fragment in situ.

Zachary Taylor President Pipe



President 1849-1850 Pipe production initiated circa 1849



